Chapter 12

Transportation and Circulation

Chapter 12. Transportation and Circulation

INTRODUCTION

Alternative 4, "EBMUD-Only Lower American River Delivery," and Alternative 5, "Sacramento River Delivery," in this REIR/SEIS include facilities that are very similar to those discussed for Alternative 3, "Joint Water Supply," in the 1997 DEIR/EIS. The 1997 DEIR/EIS therefore includes a full discussion of the environmental setting for these alternatives, and that information is summarized below as appropriate. Because Alternative 6, "Freeport East Delivery," Alternative 7, "Freeport South Delivery," and Alternative 8, "Bixler Delivery," include facilities in locations that were not described in the 1997 DEIR/EIS, additional information is provided in the "Affected Environment" section below.

AFFECTED ENVIRONMENT

Alternative 4: EBMUD-Only Lower American River Delivery and Alternative 5: Sacramento River Delivery

Affected Roadways

The roadways that would be affected by Alternatives 4 and 5 are the same as those affected by Alternative 3, as described in the 1997 Draft EIR/EIS (Tables 12-1, 12-2, and 12-3). In addition, Jibboom Street would have to be crossed to extend the pipeline from the intake facility at the Sacramento River (Alternative 5) to the previously described alignment for Alternative 3, intake Site 1, which runs down Bannon Street.

Rail Lines

The intake to FSC pipeline alignment would cross the UPRR tracks in several locations, including North B Street, Richards Boulevard, 24th Street, Lanatt Way (south of Interstate 80), 14th Street, C Street at 20th Street, Elvas Avenue (south of the California State University, Sacramento campus and north of Folsom Boulevard), and Florin-Perkins Road (south of Folsom Boulevard and north of Jackson Highway/State Route 16). These railroad tracks are used primarily to transport freight. This pipeline alignment also parallels the UPRR along the Elvas Avenue and C Street bypass options.

Table 12-1. Street Segments Affected by Construction of the Intake to Folsom South Canal Pipeline Alignment UnderAlternatives 4 and 5*

Alignment Segment/Roadway	Approximate Length of Construction (ft)
Bercut Road	500
Bannon Street	2,400
North 5th Street	2,100
10th Street	3,600
Richards Boulevard	2,300
24th Street	580
Lanatt Way	920
57th Street	1,200
North B Street	4,500
14th Avenue	1,280
C Street	11,500
Elvas Avenue	12,300
56th Avenue	1,000
J Street	700
College Town Drive	3,200
Hornet Drive	1,500
Folsom Boulevard	3,750
Brighton Avenue	2,650
Ramona Avenue	4,050
Cucamonga Avenue	1,400
Florin-Perkins Road	750
Kiefer Boulevard	16,750

*Does not include roadways crossed by the pipeline (see Table 12-2).

Table 12-2. Roadways Crossed by the Intake to Folsom South Canal Pipeline Alignment Under Alternatives 4 and 5
State Highways
State Route 160
Capitol City Freeway (formerly Business 80)[a]
City of Sacramento Roadways
Richards Boulevard
15th through 33rd Streets
H Street
Power Inn Road
Florin-Perkins Road
Jackson Highway/State Route 16
Folsom Boulevard
Watt Avenue
South Port Drive
Tallyho Drive
Mayhew Road
Bradshaw Road
Excelsior Road
Eagles Nest Road

[a] Because the pipeline would cross under an elevated portion of this highway, open trench construction would not disrupt traffic.

Table 12-3. Roadways Crossed by the Folsom South Canal to Mokelumne Aqueducts Pipeline Alignment Under Alternatives 4, 5, and 6
State Highways
State Route 88
State Route 12
Sacramento County Roads
Borden Road
Clay Station Road
San Joaquin County Roads
Liberty Road
Buena Vista Road
Acampo Road

Alternative 6: Freeport East Delivery

Affected Roadways

Construction between Freeport and the turnout at the FSC would occur primarily within existing streets and roadways in the City and County. Affected street segments, the approximate length of construction along each, and the jurisdiction under which they fall are presented in Table 12-4. In addition, 2.9 miles of County undeveloped right-of-way east of the intersection of Excelsior Road and Gerber Road would be utilized to construct the pipeline to the turnout at the FSC.

Table 12-4. Street Segments Affected by Construction of the Freeport to Folsom South Canal Pipeline Alignment Under Alternative 6 *		
Alignment Segment/ Roadway	**Approximate Length of Construction (ft)**	**Roadway Jurisdiction**
State Route 160 (Freeport Blvd.)	3,695	Sacramento County
Meadowview Road	12,141	City of Sacramento
Mack Road	14,253	City of Sacramento
Elsie Avenue	2,639	Sacramento County
Power Inn Road	2,639	Sacramento County
Gerber Road	32,201	Sacramento County

* Does not include major roadways crossed by the pipeline (see Table 12-5).

The roadways that would be crossed by the Freeport to FSC alignment are listed in Table 12-5. These roadways include city streets, state highways, and county roads.

Table 12-5. Major Roadways Crossed by the Pipeline Alignments between Freeport and Folsom South Canal Under Alternative 6
State Highways
State Route 99 *
Sacramento County Roads
Franklin Boulevard
Tiogawoods Drive
Florin Road
Excelsior Road
City of Sacramento Roadways
Amhearst Street
19th Street
24th Street
Center Parkway
Stockton Boulevard

* Because the pipeline would intersect State Route 99 at an elevated portion of Mack Road, boring would be used to accomplish the crossing. As a result, traffic would not be disrupted.

The roadways crossed by the FSC to Mokelumne Aqueducts pipeline are listed in Table 12-3.

Rail Lines

The Freeport to FSC pipeline alignment would cross one set of UPRR tracks on Meadowview Road, approximately 0.3 miles west of where Meadowview Road turns into Mack Road. The alignment would also cross two sets of Southern Pacific Transportation Company tracks, once approximately 1 mile east of the intersection of Power Inn Road and Gerber Road on Gerber Road, and again 2.5 miles further east along Gerber Road.

Alternative 7: Freeport South Delivery

Affected Roadways

Construction between Freeport and Stockton to the Mokelumne Aqueducts would occur in the I-5, Thornton Road, and Pacific Avenue rights-of-way. Construction would generally proceed south along the east side of I-5 to Peltier Road. At the intersection of Peltier Road, the alignment would shift to Thornton Road and proceed south into Stockton. At Hammer Lane, Thornton Road merges with Pacific Avenue, allowing the alignment to continue south to March Road and the final confluence with the Mokelumne Aqueducts. Table 12-6 lists the street segments that would be affected by this alignment, the approximate length of the construction along each, and the jurisdiction under which they fall.

Table 12-6. Street Segments Affected by Construction of the Freeport to Stockton Pipeline Alignment under Alternative 7*

Alignment Segment/ Roadway	Approximate Length of Construction (ft)	Roadway Jurisdiction
Interstate 5	110, 880	Caltrans
Thorton Road	71,280	San Joaquin County
Pacific Avenue	12,144	San Joaquin County

* Does not include roadways crossed by the pipeline (see Table 12-7).

The roadways that would be crossed by the Freeport to Stockton alignment are listed in Table 12-7. These roadways include city streets, state highways, and county roads.

Table 12-7. Roadways Crossed by the Pipeline Alignment between Freeport and Stockton under Alternative 7

State Highways
- State Route 12

Sacramento County Roads
- Hood-Franklin Road
- Lambert Road
- Twin Cities Road

San Joaquin County Roads
- Walnut Grove Road
- Peltier Road
- Woodbridge Road
- Eight Mile Road
- Hammer Lane

City of Stockton Roads
- Benjamin Holt Drive

Rail Lines

The alignment between Freeport and Stockton parallels a section of the UPRR system that runs along the east side of I-5 in the vicinity of the I-5/Peltier Road intersection. Although EBMUD does not expect to cross the track or run the alignment in the railway right-of-way, construction limitations may require that the alignment be shifted east into the railway right-of-way. Alterations that could potentially affect railway transportation would be immediately brought to the attention of UPRR officials for encroachment determinations.

Alternative 8: Bixler Delivery

Affected Roadways

Construction of the intake structure and WTP for Alternative 8 would not affect any roadways. Temporary staging areas may be set up along Orwood road, but actual construction activities would occur outside the road right-of-way.

In addition, under the advanced treatment option, finished water and brine pipelines would be constructed between Bixler Road and Concord, following the Mokelume Aqueducts right-of-way. Table 12-8 lists the roadways that would be crossed if this treatment option is included in Alternative 8. These roadways

include city streets, county roads, and state highways.

Table 12-8. Roadways Crossed by the Finished Water and Brine Pipelines

State Highway
State Route 4
Contra Costa County Roads
Byron Highway
Sellers Avenue
Railroad Avenue
Bailey Road
City of Concord
Waterfront Road

Rail Lines

Construction of the intake structure, WTP, and finished water and brine pipelines would not occur along any rail lines. Temporary staging areas may be set up near the railroad tracks that parallel the Mokelumne Aqueducts on the north.

ENVIRONMENTAL CONSEQUENCES

Methods and Assumptions

The facilities associated with Alternative 4, "EBMUD-Only Lower American River Delivery," and Alternative 5, "Sacramento River Delivery," are essentially identical to Alternative 3, "Joint Water Supply," as described in the 1997 DEIR/EIS. Therefore, impacts and mitigation measures described for Alternative 3 also apply to Alternatives 4 and 5. Alternative 6, "Freeport East Delivery," Alternative 7, "Freeport South Delivery," and Alternative 8, "Bixler Delivery," would also have impacts similar to Alternative 3. The significance thresholds and criteria used in the 1997 DEIR/EIS also apply to these alternatives.

Significance Criteria

The significance criteria outlined in the 1997 DEIR/EIS for transportation and circulation were used to analyze the alternatives in this document. These criteria include assessing whether the alternatives would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system or interfere with emergency response plans or emergency evacuation plans.

For purposes of this analysis, a significant impact could also result if the project would substantially alter the present patterns of circulation or movement, substantially increase the traffic delay experienced by drivers, result in substantial deterioration of the roadway surface following completion of construction activities, or expose people to roadway safety hazards.

Impacts Found to Be Less Than Significant

Alternative 4: EBMUD-Only Lower American River Delivery

The impacts and mitigation requirements associated with Alternative 4 are identical to those described for Alternative 3 in the 1997 DEIR/EIS. These impacts include:

- Minor alterations in circulation patterns and traffic delays during construction.
- Potential deterioration of roadway surfaces from construction.
- Temporary increases in traffic during construction.
- Potential for temporary interference with emergency response routes during construction.
- Temporary roadway surface hazards.

As described in the 1997 DEIR/EIS, these impacts are less than significant. No mitigation is required.

Alternative 5: Sacramento River Delivery

This alternative would result in impacts that are essentially identical to those described for Alternative 3 in the 1997 DEIR/EIS and summarized above under Alternative 4. The location of the intake facility on the Sacramento River and additional installation of pipeline along Jibboom Street adds minimal additional adverse effects on transportation and circulation in the area.

These impacts are less than significant. No mitigation is required.

Alternative 6: Freeport East Delivery

The temporary impacts on the existing roadway and traffic volumes described for Alternative 4 would also apply to Alternative 6. As discussed, these impacts are less than significant and do not require mitigation. Construction of the Freeport to FSC pipeline segment in existing streets could result in potential traffic delays. However, since the majority of the alignment (i.e., that between Meadowview Road and the intersection of Gerber Road and Florin Road) lies within four-lane streets, almost all of which also include an additional middle turn lane, traffic could be re-routed to minimize delays due to lane closure. The remainder of the route (i.e., the portion along State Route 160 and the portion that continues east along Gerber Road) is equipped with a wide shoulder and adequate right-of-way to minimize the use of construction equipment in the actual roadway.

EBMUD plans to utilize tunnel construction in the vicinity of State Route 99 to minimize potential effects on circulation patterns.

These impacts are less than significant. No mitigation is required.

Alternative 7: Freeport South Delivery

This alternative would result in impacts that are essentially identical to those described for Alternative 3 in the 1997 DEIR/EIS and summarized above under Alternative 4.

Traffic delays could occur while construction is being completed in the right-of-way off of I-5, Thornton Road, or Pacific Avenue. This impact is less than significant. No mitigation is required.

Alternative 8: Bixler Delivery

Under Alternative 8, the present patterns of circulation and movement would remain essentially unaffected. The construction and operation of the Bixler intake facility, WTP, and pipelines would not occur within any roadway or rail line. Although staging areas may be located near transportation resources, potentially causing a slight increase in traffic and roadway safety hazards, direct impacts would be avoided.

In addition, the roads crossed by the finished water and brine pipelines would only be temporarily affected by slight increases in traffic during construction.

These impacts are less than significant. No mitigation is required.

Significant Impacts and Mitigation

Implementation of Alternatives 4, 5, 6, 7, or 8 is not expected to result in significant impacts on transportation and circulation resources.